

SEQUENCE LISTING

<110> Gallatin, Michael W.
Van der Vieren, Monica

<120> Novel Human B2

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<150> 08/286,889

<151> 1994-08-05

<150> 08/362,652

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Ser Leu Val Gly Thr Pro Leu Ser Ala Phe Gly Asn Leu Arg Pro Val
740 745 750

Leu Ala Glu Asp Ala Gln Arg Leu Phe Thr Ala Leu Phe Pro Phe Glu
755 760 765

Lys Asn Cys Gly Asn Asp Asn Ile Cys Gln Asp Asp Leu Ser Ile Thr
770 775 780

Phe Ser Phe Met Ser Leu Asp Cys Leu Val Val Gly Gly Pro Arg Glu
785 790 795 800

Phe Asn Val Thr Val Thr Val Arg Asn Asp Gly Glu Asp Ser Tyr Arg
805 810 815

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Thr	Gln	Val	Thr	Phe	Phe	Phe	Pro	Leu	Asp	Leu	Ser	Tyr	Arg	Lys	Val
			820					825					830		
Ser	Thr	Leu	Gln	Asn	Gln	Arg	Ser	Gln	Arg	Ser	Trp	Arg	Leu	Ala	Cys
		835					840					845			
Glu	Ser	Ala	Ser	Ser	Thr	Glu	Val	Ser	Gly	Ala	Leu	Lys	Ser	Thr	Ser
		850				855					860				
Cys	Ser	Ile	Asn	His	Pro	Ile	Phe	Pro	Glu	Asn	Ser	Glu	Val	Thr	Phe
865					870					875					880
Asn	Ile	Thr	Phe	Asp	Val	Asp	Ser	Lys	Ala	Ser	Leu	Gly	Asn	Lys	Leu
				885					890					895	
Leu	Leu	Lys	Ala	Asn	Val	Thr	Ser	Glu	Asn	Asn	Met	Pro	Arg	Thr	Asn
			900					905					910		
Lys	Thr	Glu	Phe	Gln	Leu	Glu	Leu	Pro	Val	Lys	Tyr	Ala	Val	Tyr	Met
		915					920					925			
Val	Val	Thr	Ser	His	Gly	Val	Ser	Thr	Lys	Tyr	Leu	Asn	Phe	Thr	Ala
		930				935					940				
Ser	Glu	Asn	Thr	Ser	Arg	Val	Met	Gln	His	Gln	Tyr	Gln	Val	Ser	Asn
945					950					955					960
Leu	Gly	Gln	Arg	Ser	Leu	Pro	Ile	Ser	Leu	Val	Phe	Leu	Val	Pro	Val
				965					970					975	
Arg	Leu	Asn	Gln	Thr	Val	Ile	Trp	Asp	Arg	Pro	Gln	Val	Thr	Phe	Ser
			980					985					990		
Glu	Asn	Leu	Ser	Ser	Thr	Cys	His	Thr	Lys	Glu	Arg	Leu	Pro	Ser	His
		995					1000					1005			
Ser	Asp	Phe	Leu	Ala	Glu	Leu	Arg	Lys	Ala	Pro	Val	Val	Asn	Cys	Ser
	1010					1015					1020				
Ile	Ala	Val	Cys	Gln	Arg	Ile	Gln	Cys	Asp	Ile	Pro	Phe	Phe	Gly	Ile
1025					1030					1035					1040
Gln	Glu	Glu	Phe	Asn	Ala	Thr	Leu	Lys	Gly	Asn	Leu	Ser	Phe	Asp	Trp
				1045					1050					1055	
Tyr	Ile	Lys	Thr	Ser	His	Asn	His	Leu	Leu	Ile	Val	Ser	Thr	Ala	Glu
		1060					1065						1070		
Ile	Leu	Phe	Asn	Asp	Ser	Val	Phe	Thr	Leu	Leu	Pro	Gly	Gln	Gly	Ala
		1075					1080					1085			
Phe	Val	Arg	Ser	Gln	Thr	Glu	Thr	Lys	Val	Glu	Pro	Phe	Glu	Val	Pro
		1090				1095					1100				
Asn	Pro	Leu	Pro	Leu	Ile	Val	Gly	Ser	Ser	Val	Gly	Gly	Leu	Leu	Leu
1105					1110					1115					1120
Leu	Ala	Leu	Ile	Thr	Ala	Ala	Leu	Tyr	Lys	Leu	Gly	Phe	Phe	Lys	Arg
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Gln	Tyr	Lys	Asp	Met	Met	Ser	Glu	Gly	Gly	Pro	Pro	Gly	Ala	Glu	Pro
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Gln

<210> 4
 <211> 1163
 <212> PRT
 <213> Homo sapiens

<400> 4
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 35 40 45
 Val Val Val Gly Ala Pro Gln Lys Ile Ile Ala Ala Asn Gln Ile Gly
 50 55 60
 Gly Leu Tyr Gln Cys Gly Tyr Ser Thr Gly Ala Cys Glu Pro Ile Gly
 65 70 75 80
 Leu Gln Val Pro Pro Glu Ala Val Asn Met Ser Leu Gly Leu Ser Leu
 85 90 95
 Ala Ser Thr Thr Ser Pro Ser Gln Leu Leu Ala Cys Gly Pro Thr Val
 100 105 110
 His His Glu Cys Gly Arg Asn Met Tyr Leu Thr Gly Leu Cys Phe Leu
 115 120 125
 Leu Gly Pro Thr Gln Leu Thr Gln Arg Leu Pro Val Ser Arg Gln Glu
 130 135 140
 Cys Pro Arg Gln Glu Gln Asp Ile Val Phe Leu Ile Asp Gly Ser Gly
 145 150 155 160
 Ser Ile Ser Ser Arg Asn Phe Ala Thr Met Met Asn Phe Val Arg Ala
 165 170 175
 Val Ile Ser Gln Phe Gln Arg Pro Ser Thr Gln Phe Ser Leu Met Gln
 180 185 190
 Phe Ser Asn Lys Phe Gln Thr His Phe Thr Phe Glu Glu Phe Arg Arg
 195 200 205
 Thr Ser Asn Pro Leu Ser Leu Leu Ala Ser Val His Gln Leu Gln Gly
 210 215 220
 Phe Thr Tyr Thr Ala Thr Ala Ile Gln Asn Val Val His Arg Leu Phe
 225 230 235 240
 His Ala Ser Tyr Gly Ala Arg Arg Asp Ala Ile Lys Ile Leu Ile Val
 245 250 255
 Ile Thr Asp Gly Lys Lys Glu Gly Asp Ser Leu Asp Tyr Lys Asp Val
 260 265 270

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Ile	Pro	Met	Ala	Asp	Ala	Ala	Gly	Ile	Ile	Arg	Tyr	Ala	Ile	Gly	Val
		275					280					285			
Gly	Leu	Ala	Phe	Gln	Asn	Arg	Asn	Ser	Trp	Lys	Glu	Leu	Asn	Asp	Ile
	290					295					300				
Ala	Ser	Lys	Pro	Ser	Gln	Glu	His	Ile	Phe	Lys	Val	Glu	Asp	Phe	Asp
305					310					315					320
Ala	Leu	Lys	Asp	Ile	Gln	Asn	Gln	Leu	Lys	Glu	Lys	Ile	Phe	Ala	Ile
				325					330					335	
Glu	Gly	Thr	Glu	Thr	Ile	Ser	Ser	Ser	Ser	Phe	Glu	Leu	Glu	Met	Ala
			340					345					350		
Gln	Glu	Gly	Phe	Ser	Ala	Val	Phe	Thr	Pro	Asp	Gly	Pro	Val	Leu	Gly
		355					360					365			
Ala	Val	Gly	Ser	Phe	Thr	Trp	Ser	Gly	Gly	Ala	Phe	Leu	Tyr	Pro	Pro
	370					375					380				
Asn	Met	Ser	Pro	Thr	Phe	Ile	Asn	Met	Ser	Gln	Glu	Asn	Val	Asp	Met
385					390					395					400
Arg	Asp	Ser	Tyr	Leu	Gly	Tyr	Ser	Thr	Glu	Leu	Ala	Leu	Trp	Lys	Gly
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Val	Gln	Ser	Leu	Val	Leu	Gly	Ala	Pro	Arg	Tyr	Gln	His	Ile	Gly	Lys
			420					425					430		
Ala	Val	Ile	Phe	Ile	Gln	Val	Ser	Arg	Gln	Trp	Arg	Met	Lys	Ala	Glu
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Pro	His	Tyr	Tyr	Glu	Gln	Thr	Arg	Gly	Gly	Gln	Val	Ser	Val	Cys	Pro
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Leu	Pro	Arg	Gly	Trp	Arg	Arg	Trp	Trp	Cys	Asp	Ala	Val	Leu	Tyr	Gly
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Glu	Gln	Gly	His	Pro	Trp	Gly	Arg	Phe	Gly	Ala	Ala	Leu	Thr	Val	Leu
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Gly	Asp	Val	Asn	Gly	Asp	Lys	Leu	Thr	Asp	Val	Val	Ile	Gly	Ala	Pro
	530					535					540				
Gly	Glu	Glu	Glu	Asn	Arg	Gly	Ala	Val	Tyr	Leu	Phe	His	Gly	Val	Leu
545					550					555					560
Gly	Pro	Ser	Ile	Ser	Pro	Ser	His	Ser	Gln	Arg	Ile	Ala	Gly	Ser	Gln
				565					570					575	
Leu	Ser	Ser	Arg	Leu	Gln	Tyr	Phe	Gly	Gln	Ala	Leu	Ser	Gly	Gly	Gln
			580					585					590		

Asp	Leu	Thr	Gln	Asp	Gly	Leu	Val	Asp	Leu	Ala	Val	Gly	Ala	Arg	Gly
		595				600						605			
Gln	Val	Leu	Leu	Leu	Arg	Thr	Arg	Pro	Val	Leu	Trp	Val	Gly	Val	Ser
	610					615					620				
Met	Gln	Phe	Ile	Pro	Ala	Glu	Ile	Pro	Arg	Ser	Ala	Phe	Glu	Cys	Arg
625					630					635					640
Glu	Gln	Val	Val	Ser	Glu	Gln	Thr	Leu	Val	Gln	Ser	Asn	Ile	Cys	Leu
				645					650					655	
Tyr	Ile	Asp	Lys	Arg	Ser	Lys	Asn	Leu	Leu	Gly	Ser	Arg	Asp	Leu	Gln
			660					665					670		
Ser	Ser	Val	Thr	Leu	Asp	Leu	Ala	Leu	Ala	Pro	Gly	Arg	Leu	Ser	Pro
		675					680					685			
Arg	Ala	Ile	Phe	Gln	Glu	Thr	Lys	Asn	Arg	Ser	Leu	Ser	Arg	Val	Arg
	690					695					700				
Val	Leu	Gly	Leu	Lys	Ala	His	Cys	Glu	Asn	Phe	Asn	Leu	Leu	Leu	Pro
705					710					715					720
Ser	Cys	Val	Glu	Asp	Ser	Val	Ile	Pro	Ile	Ile	Leu	Arg	Leu	Asn	Phe
				725					730					735	
Thr	Leu	Val	Gly	Lys	Pro	Leu	Leu	Ala	Phe	Arg	Asn	Leu	Arg	Pro	Met
			740					745					750		
Leu	Ala	Ala	Leu	Ala	Gln	Arg	Tyr	Phe	Thr	Ala	Ser	Leu	Pro	Phe	Glu
		755					760					765			
Lys	Asn	Cys	Gly	Ala	Asp	His	Ile	Cys	Gln	Asp	Asn	Leu	Gly	Ile	Ser
	770					775					780				
Phe	Ser	Phe	Pro	Gly	Leu	Lys	Ser	Leu	Leu	Val	Gly	Ser	Asn	Leu	Glu
785					790					795					800
Leu	Asn	Ala	Glu	Val	Met	Val	Trp	Asn	Asp	Gly	Glu	Asp	Ser	Tyr	Gly
				805					810					815	
Thr	Thr	Ile	Thr	Phe	Ser	His	Pro	Ala	Gly	Leu	Ser	Tyr	Arg	Tyr	Val
			820					825					830		
Ala	Glu	Gly	Gln	Lys	Gln	Gly	Gln	Leu	Arg	Ser	Leu	His	Leu	Thr	Cys
		835					840					845			
Cys	Ser	Ala	Pro	Val	Gly	Ser	Gln	Gly	Thr	Trp	Ser	Thr	Ser	Cys	Arg
	850					855					860				
Ile	Asn	His	Leu	Ile	Phe	Arg	Gly	Gly	Ala	Gln	Ile	Thr	Phe	Leu	Ala
865					870					875					880
Thr	Phe	Asp	Val	Ser	Pro	Lys	Ala	Val	Gly	Leu	Asp	Arg	Leu	Leu	Leu
				885					890					895	
Ile	Ala	Asn	Val	Ser	Ser	Glu	Asn	Asn	Ile	Pro	Arg	Thr	Ser	Lys	Thr
			900					905					910		
Ile	Phe	Gln	Leu	Glu	Leu	Pro	Val	Lys	Tyr	Ala	Val	Tyr	Ile	Val	Val
		915					920					925			

Ser Ser His Glu Gln Phe Thr Lys Tyr Leu Asn Phe Ser Glu Ser Glu
930 935 940

Glu Lys Glu Ser His Val Ala Met His Arg Tyr Gln Val Asn Asn Leu
945 950 955 960

Gly Gln Arg Asp Leu Pro Val Ser Ile Asn Phe Trp Val Pro Val Glu
965 970 975

Leu Asn Gln Glu Ala Val Trp Met Asp Val Glu Val Ser His Pro Gln
980 985 990

Asn Pro Ser Leu Arg Cys Ser Ser Glu Lys Ile Ala Pro Pro Ala Ser
995 1000 1005

Asp Phe Leu Ala His Ile Gln Lys Asn Pro Val Leu Asp Cys Ser Ile
1010 1015 1020

Ala Gly Cys Leu Arg Phe Arg Cys Asp Val Pro Ser Phe Ser Val Gln
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Glu Glu Leu Asp Phe Thr Leu Lys Gly Asn Leu Ser Phe Gly Trp Val
1045 1050 1055

Arg Gln Ile Leu Gln Lys Lys Val Ser Val Val Ser Val Ala Glu Ile
1060 1065 1070

Ile Phe Asp Thr Ser Val Tyr Ser Gln Leu Pro Gly Gln Glu Ala Phe
1075 1080 1085

Met Arg Ala Gln Thr Ile Thr Val Leu Glu Lys Tyr Lys Val His Asn
1090 1095 1100

Pro Ile Pro Leu Ile Val Gly Ser Ser Ile Gly Gly Leu Leu Leu Leu
1105 1110 1115 1120

Ala Leu Ile Thr Ala Val Leu Tyr Lys Val Gly Phe Phe Lys Arg Gln
1125 1130 1135

Tyr Lys Glu Met Met Glu Glu Ala Asn Gly Gln Ile Ala Pro Glu Asn
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Gly Thr Gln Thr Pro Ser Pro Pro Ser Glu Lys
1155 1160

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<212> PRT
<213> dog

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<210> 6
<211> 35
<212> DNA
<213> Artificial Sequence

<220>

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<220>
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<220>
<223> Description of Artificial Sequence: primer

<400> 8
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<220>
<223> Description of Artificial Sequence: primer

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<400> 9
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<220>
<223> Description of Artificial Sequence: primer

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<400> 10
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<220>
<223> Description of Artificial Sequence: primer

<400> 11
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<210> 12
<211> 18
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<220>
<223> Description of Artificial Sequence: primer

<400> 12
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<210> 13
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<220>
<223> Description of Artificial Sequence: primer

<400> 13
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<210> 14
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<220>
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<210> 15
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<212> PRT
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<400> 15
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1 5 10

<210> 16
<211> 14
<212> PRT
<213> dog

<400> 16
Leu Tyr Asp Xaa Val Ala Ala Thr Gly Leu Xaa Gln Pro Ile
1 5 10

<210> 17
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F0900"CH6T000

<210> 23

<211> 21
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<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 23
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<210> 24
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gcgtggccca gcttggcgga tctagactcg tgggtgggagc ccccttgag gtggtggcgg 120
tcaaccaaac aggaaggttg tatgactgtg tggctgccac tggccttgtc aaccataacc 180
cctgcacaca cccccagatg ctgtgaacat gtccctgggt ctgtccctgt cagccgccgc 240
cagtcgcccc tggctgctgg cctgtggccc aaccatgcac agagcctgtg gggagaatat 300
gtatgcagaa ggcttttgcc tcctgttgga ctcccatctg cagaccattt ggacagtacc 360
tgctgcccta ccagagtgtc caagtcaaga gatggacatt gtcttcctga ttgatgggtc 420
tggcagtatg agcaaagtga ctttaaaca atgaaggatt tgtgagagct gtgatgggac 480
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acttcacctt cagcaattc cagagcagct ggaaccctct gagcctgggt gatccattg 600
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gcaaaaatac aaagaccccc tggagtacga ggacgtatcc ccaggcagag agagcggatc 780
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gacaacattg gctcagagcc ggctcaggac catgtgttca gggaggacaa ctttcagca 900
ctcagcagca tccaggagca gctgcaggag aagatctttg cactcgaagg aaccagtcg 960
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<210> 25
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

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<210> 31

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<220>
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<400> 31
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<210> 32
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<210> 33
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<210> 35
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<220>
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<400> 35
tgaagattgg gggtaaataa caga 24

<210> 36
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<212> DNA

099494-02601

<213> Rattus rattus

<220>

<221> CDS

<222> (1)..(3453)

<220>

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ccc atc gtg ttc aga gag gat gca gcc agc ttt gga cag act gtg gtg	96
Pro Ile Val Phe Arg Glu Asp Ala Ala Ser Phe Gly Gln Thr Val Val	
20 25 30	
cag ttt ggt gga tct cga ctc gtg gtg gga gcc cct ctg gag gcg gtg	144
Gln Phe Gly Gly Ser Arg Leu Val Val Gly Ala Pro Leu Glu Ala Val	
35 40 45	
gca gtc aac caa aca gga cgg ttg tat gac tgt gca cct gcc act ggc	192
Ala Val Asn Gln Thr Gly Arg Leu Tyr Asp Cys Ala Pro Ala Thr Gly	
50 55 60	
atg tgc cag ccc atc gta ctg cgc agt ccc cta gag gca gtg aac atg	240
Met Cys Gln Pro Ile Val Leu Arg Ser Pro Leu Glu Ala Val Asn Met	
65 70 75 80	
tcc ctg ggc ctg tct ctg gtg act gcc acc aat aac gcc cag ttg ctg	288
Ser Leu Gly Leu Ser Leu Val Thr Ala Thr Asn Asn Ala Gln Leu Leu	
85 90 95	
gct tgt ggt cca act gca cag aga gct tgt gtg aag aac atg tat gcg	336
Ala Cys Gly Pro Thr Ala Gln Arg Ala Cys Val Lys Asn Met Tyr Ala	
100 105 110	
aaa ggt tcc tgc ctc ctt ctc ggc tcc agc ttg cag ttc atc cag gca	384
Lys Gly Ser Cys Leu Leu Leu Gly Ser Ser Leu Gln Phe Ile Gln Ala	
115 120 125	
gtc cct gcc tcc atg cca gag tgt cca aga caa gag atg gac att gct	432
Val Pro Ala Ser Met Pro Glu Cys Pro Arg Gln Glu Met Asp Ile Ala	
130 135 140	
ttc ctg att gat ggt tct ggc agc att aac caa agg gac ttt gcc cag	480
Phe Leu Ile Asp Gly Ser Gly Ser Ile Asn Gln Arg Asp Phe Ala Gln	
145 150 155 160	
atg aag gac ttt gtc aaa gct ttg atg gga gag ttt gcg agc acc agc	528
Met Lys Asp Phe Val Lys Ala Leu Met Gly Glu Phe Ala Ser Thr Ser	
165 170 175	
acc ttg ttc tcc ctg atg caa tac tcg aac atc ctg aag acc cat ttt	576
Thr Leu Phe Ser Leu Met Gln Tyr Ser Asn Ile Leu Lys Thr His Phe	
180 185 190	
acc ttc act gaa ttc aag aac atc ctg gac cct cag agc ctg gtg gat	624
Thr Phe Thr Glu Phe Lys Asn Ile Leu Asp Pro Gln Ser Leu Val Asp	
195 200 205	

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ccc att gtc cag ctg caa ggc ctg acc tac aca gcc aca ggc atc cgg Pro Ile Val Gln Leu Gln Gly Leu Thr Tyr Thr Ala Thr Gly Ile Arg 210 215 220	672
aca gtg atg gaa gag cta ttt cat agc aag aat ggg tcc cgt aaa agt Thr Val Met Glu Glu Leu Phe His Ser Lys Asn Gly Ser Arg Lys Ser 225 230 235 240	720
gcc aag aag atc ctc ctt gtc atc aca gat ggg cag aaa tac aga gac Ala Lys Lys Ile Leu Leu Val Ile Thr Asp Gly Gln Lys Tyr Arg Asp 245 250 255	768
ccc ctg gag tat agt gat gtc att ccc gcc gca gac aaa gct ggc atc Pro Leu Glu Tyr Ser Asp Val Ile Pro Ala Ala Asp Lys Ala Gly Ile 260 265 270	816
att cgt tat gct att ggg gtg gga gat gcc ttc cag gag ccc act gcc Ile Arg Tyr Ala Ile Gly Val Gly Asp Ala Phe Gln Glu Pro Thr Ala 275 280 285	864
ctg aag gag ctg aac acc att ggc tca gct ccc cca cag gac cac gtg Leu Lys Glu Leu Asn Thr Ile Gly Ser Ala Pro Pro Gln Asp His Val 290 295 300	912
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cag gag aaa atc ttc gcc att gag gga act caa tca agg tca agt agt Gln Glu Lys Ile Phe Ala Ile Glu Gly Thr Gln Ser Arg Ser Ser Ser 325 330 335	1008
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tcg gat gga ccc gtt ctg ggg gcc gyg gga agc ttc agc tgg tcc gga Ser Asp Gly Pro Val Leu Gly Ala Xaa Gly Ser Phe Ser Trp Ser Gly 355 360 365	1104
ggt gcc ttc tta tat ccc cca aat acg aga ccc acc ttt atc aac atg Gly Ala Phe Leu Tyr Pro Pro Asn Thr Arg Pro Thr Phe Ile Asn Met 370 375 380	1152
tct cag gag aat gtg gac atg aga gac tcc tac ctg ggt tac tcc acc Ser Gln Glu Asn Val Asp Met Arg Asp Ser Tyr Leu Gly Tyr Ser Thr 385 390 395 400	1200
gca gtg gcc ttt tgg aag ggg gtt cac agc ctg atc ctg ggg gcc ccg Ala Val Ala Phe Trp Lys Gly Val His Ser Leu Ile Leu Gly Ala Pro 405 410 415	1248
cgt cac cag cac acg ggg aag gtt gtc atc ttt acc cag gaa gcc agg Arg His Gln His Thr Gly Lys Val Val Ile Phe Thr Gln Glu Ala Arg 420 425 430	1296
cat tgg agg ccc aag tct gaa gtc aga ggg aca cag atc ggc tcc tac His Trp Arg Pro Lys Ser Glu Val Arg Gly Thr Gln Ile Gly Ser Tyr 435 440 445	1344

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ttc	ggg	gcc	tct	ctc	tgt	tct	gtg	gac	gtg	gat	aga	gat	ggc	agc	acy	1392
Phe	Gly	Ala	Ser	Leu	Cys	Ser	Val	Asp	Val	Asp	Arg	Asp	Gly	Ser	Xaa	
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Gly	Gln	Val	Ser	Val	Xaa	Pro	Val	Pro	Gly	Val	Arg	Gly	Arg	Trp	Gln	
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Cys	Glu	Ala	Thr	Leu	His	Gly	Glu	Gln	Xaa	His	Pro	Trp	Gly	Arg	Phe	
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Gly	Val	Ala	Leu	Thr	Val	Leu	Gly	Asp	Val	Asn	Gly	Asp	Asn	Leu	Ala	
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Tyr	Ile	Phe	His	Gly	Ala	Ser	Arg	Leu	Glu	Ile	Met	Pro	Ser	Pro	Ser	
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Leu	Leu	Lys	Val	Glu	Leu	Ser	Ile	Arg	Phe	Ala	Pro	Met	Glu	Val	Ala	
	610					615					620					
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Lys	Ala	Val	Tyr	Gln	Cys	Trp	Glu	Arg	Thr	Pro	Thr	Val	Leu	Glu	Ala	
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gga	gag	gcc	act	gtc	tgt	ctc	act	gtc	cac	aaa	ggc	tca	cct	gac	ctg	1968
Gly	Glu	Ala	Thr	Val	Cys	Leu	Thr	Val	His	Lys	Gly	Ser	Pro</			

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aag ctg ctt ttg ccg gac tgt gtg gaa gat gca gtg agc cct atc atc Lys Leu Leu Leu Pro Asp Cys Val Glu Asp Ala Val Ser Pro Ile Ile 705 710 715 720	2160
ctg cgc ctc aac ttt tcc ctg gtg aga gac tct gct tca ccc agg aac Leu Arg Leu Asn Phe Ser Leu Val Arg Asp Ser Ala Ser Pro Arg Asn 725 730 735	2208
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tac cga cgg gta aca ggg act cag caa cct cat cag tac cca cta cgc Tyr Arg Arg Val Thr Gly Thr Gln Gln Pro His Gln Tyr Pro Leu Arg 820 825 830	2496
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acc ctg atc agt agg caa gaa gat tcc acc aac cat gtc aac ttt tca Thr Leu Ile Ser Arg Gln Glu Asp Ser Thr Asn His Val Asn Phe Ser 915 920 925	2784

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 Ser Ser His Gly Gly Arg Arg Gln Glu Ala Ala His Arg Tyr Arg Val
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aat aac ctg agt cca ctg aag ctg gcc gtc aga gtt aac ttc tgg gtc 2880
 Asn Asn Leu Ser Pro Leu Lys Leu Ala Val Arg Val Asn Phe Trp Val
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cct gtc ctt ctg aac ggt gtg gct gtg tgg gac gtg act ctg agc agc 2928
 Pro Val Leu Leu Asn Gly Val Ala Val Trp Asp Val Thr Leu Ser Ser
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cca gca cag ggt gtc tcc tgc gtg tcc cag atg aaa cct cct cag aat 2976
 Pro Ala Gln Gly Val Ser Cys Val Ser Gln Met Lys Pro Pro Gln Asn
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ccc gac ttt ctg acc cag att cag aga cgt tct gtg ctg gac tgc tcc 3024
 Pro Asp Phe Leu Thr Gln Ile Gln Arg Arg Ser Val Leu Asp Cys Ser
 995 1000 1005

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 Ile Ala Asp Cys Leu His Ser Arg Cys Asp Ile Pro Ser Leu Asp Ile
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 Ile Thr Phe Asp Thr Ser Val Tyr Ser Gln Leu Pro Gly Gln Glu Ala
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 Phe Leu Arg Ala Gln Val Glu Thr Thr Leu Glu Glu Tyr Val Val Tyr
 1075 1080 1085

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 1090 1095 1100

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Met	Lys	Asp	Phe	Val	Lys	Ala	Leu	Met	Gly	Glu	Phe	Ala	Ser	Thr	Ser
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Ala	Lys	Lys	Ile	Leu	Leu	Val	Ile	Thr	Asp	Gly	Gln	Lys	Tyr	Arg	Asp
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Pro	Leu	Glu	Tyr	Ser	Asp	Val	Ile	Pro	Ala	Ala	Asp	Lys	Ala	Gly	Ile
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Ile	Arg	Tyr	Ala	Ile	Gly	Val	Gly	Asp	Ala	Phe	Gln	Glu	Pro	Thr	Ala
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Leu	Lys	Glu	Leu	Asn	Thr	Ile	Gly	Ser	Ala	Pro	Pro	Gln	Asp	His	Val
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 Gln Glu Lys Ile Phe Ala Ile Glu Gly Thr Gln Ser Arg Ser Ser Ser
 325 330 335
 Ser Phe Gln His Glu Met Ser Gln Glu Gly Phe Ser Ser Ala Leu Thr
 340 345 350
 Ser Asp Gly Pro Val Leu Gly Ala Xaa Gly Ser Phe Ser Trp Ser Gly
 355 360 365
 Gly Ala Phe Leu Tyr Pro Pro Asn Thr Arg Pro Thr Phe Ile Asn Met
 370 375 380
 Ser Gln Glu Asn Val Asp Met Arg Asp Ser Tyr Leu Gly Tyr Ser Thr
 385 390 395 400
 Ala Val Ala Phe Trp Lys Gly Val His Ser Leu Ile Leu Gly Ala Pro
 405 410 415
 Arg His Gln His Thr Gly Lys Val Val Ile Phe Thr Gln Glu Ala Arg
 420 425 430
 His Trp Arg Pro Lys Ser Glu Val Arg Gly Thr Gln Ile Gly Ser Tyr
 435 440 445
 Phe Gly Ala Ser Leu Cys Ser Val Asp Val Asp Arg Asp Gly Ser Xaa
 450 455 460
 Asp Leu Val Leu Ile Gly Ala Pro His Tyr Tyr Glu Gln Thr Arg Gly
 465 470 475 480
 Gly Gln Val Ser Val Xaa Pro Val Pro Gly Val Arg Gly Arg Trp Gln
 485 490 495
 Cys Glu Ala Thr Leu His Gly Glu Gln Xaa His Pro Trp Gly Arg Phe
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 Gly Val Ala Leu Thr Val Leu Gly Asp Val Asn Gly Asp Asn Leu Ala
 515 520 525
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 530 535 540
 Tyr Ile Phe His Gly Ala Ser Arg Leu Glu Ile Met Pro Ser Pro Ser
 545 550 555 560
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 565 570 575
 Gln Ser Leu Ser Gly Gly Gln Asp Leu Thr Gln Asp Gly Leu Val Asp
 580 585 590
 Leu Ala Val Gly Ala Gln Gly His Val Leu Leu Leu Arg Ser Leu Pro
 595 600 605
 Leu Leu Lys Val Glu Leu Ser Ile Arg Phe Ala Pro Met Glu Val Ala
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 Lys Ala Val Tyr Gln Cys Trp Glu Arg Thr Pro Thr Val Leu Glu Ala
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Gly Glu Ala Thr Val Cys Leu Thr Val His Lys Gly Ser Pro Asp Leu
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Leu Gly Asn Val Gln Gly Ser Val Arg Tyr Asp Leu Ala Leu Asp Pro
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Gly Arg Leu Ile Ser Arg Ala Ile Phe Asp Glu Thr Lys Asn Cys Thr
675 680 685

Leu Thr Gly Arg Lys Thr Leu Gly Leu Gly Asp His Cys Glu Thr Val
690 695 700

Lys Leu Leu Leu Pro Asp Cys Val Glu Asp Ala Val Ser Pro Ile Ile
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Leu Arg Leu Asn Phe Ser Leu Val Arg Asp Ser Ala Ser Pro Arg Asn
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Leu His Pro Val Leu Ala Val Gly Ser Gln Asp His Ile Thr Ala Ser
740 745 750

Leu Pro Phe Glu Lys Asn Cys Lys Gln Glu Leu Leu Cys Glu Gly Asp
755 760 765

Leu Gly Ile Ser Phe Asn Phe Ser Gly Leu Gln Val Leu Val Val Gly
770 775 780

Gly Ser Pro Glu Leu Thr Val Thr Val Thr Val Trp Asn Glu Gly Glu
785 790 795 800

Asp Ser Tyr Gly Thr Leu Val Lys Phe Tyr Tyr Pro Ala Gly Leu Ser
805 810 815

Tyr Arg Arg Val Thr Gly Thr Gln Gln Pro His Gln Tyr Pro Leu Arg
820 825 830

Leu Ala Cys Glu Ala Glu Pro Ala Ala Gln Glu Asp Leu Arg Ser Ser
835 840 845

Ser Cys Ser Ile Asn His Pro Ile Phe Arg Glu Gly Ala Lys Thr Thr
850 855 860

Phe Met Ile Thr Phe Asp Val Ser Tyr Lys Ala Phe Leu Gly Asp Arg
865 870 875 880

Leu Leu Leu Arg Ala Lys Ala Ser Ser Glu Asn Asn Lys Pro Asp Thr
885 890 895

Asn Lys Thr Ala Phe Gln Leu Glu Leu Pro Val Lys Tyr Thr Val Tyr
900 905 910

Thr Leu Ile Ser Arg Gln Glu Asp Ser Thr Asn His Val Asn Phe Ser
915 920 925

Ser Ser His Gly Gly Arg Arg Gln Glu Ala Ala His Arg Tyr Arg Val
930 935 940

Asn Asn Leu Ser Pro Leu Lys Leu Ala Val Arg Val Asn Phe Trp Val
945 950 955 960

Pro Val Leu Leu Asn Gly Val Ala Val Trp Asp Val Thr Leu Ser Ser
965 970 975

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Pro Ala Gln Gly Val Ser Cys Val Ser Gln Met Lys Pro Pro Gln Asn
980 985 990

Pro Asp Phe Leu Thr Gln Ile Gln Arg Arg Ser Val Leu Asp Cys Ser
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Ile Ala Asp Cys Leu His Ser Arg Cys Asp Ile Pro Ser Leu Asp Ile
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Gln Asp Glu Leu Asp Phe Ile Leu Arg Gly Asn Leu Ser Phe Gly Trp
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Val Ser Gln Thr Leu Gln Glu Lys Val Leu Leu Val Ser Glu Ala Glu
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Ile Thr Phe Asp Thr Ser Val Tyr Ser Gln Leu Pro Gly Gln Glu Ala
1060 1065 1070

Phe Leu Arg Ala Gln Val Glu Thr Thr Leu Glu Glu Tyr Val Val Tyr
1075 1080 1085

Glu Pro Ile Phe Leu Val Ala Gly Ser Ser Val Gly Gly Leu Leu Leu
1090 1095 1100

Leu Ala Leu Ile Thr Val Val Leu Tyr Lys Leu Gly Xaa Xaa Lys Arg
1105 1110 1115 1120

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Gly Ser Asn Leu Asp Val Glu Lys Pro Val Val Phe Lys Glu Asp Ala
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gcc agc ttc gga cag act gtg gtg cag ttt ggt gga tct cga ctc gtg 201
Ala Ser Phe Gly Gln Thr Val Val Gln Phe Gly Gly Ser Arg Leu Val
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Ser Asp Cys Pro Pro Ala Thr Gly Val Cys Gln Pro Ile Leu Leu His
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gct tgt gca aag aac atg tat gca aaa ggt tcc tgc ctc ctt ctg ggc 441
Ala Cys Ala Lys Asn Met Tyr Ala Lys Gly Ser Cys Leu Leu Leu Gly
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Ile Asp Gln Ser Asp Phe Thr Gln Met Lys Asp Phe Val Lys Ala Leu
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Met Gly Gln Leu Ala Ser Thr Ser Thr Ser Phe Ser Leu Met Gln Tyr
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acg Thr	tac Tyr	aca Thr	gcc Ala 230	tcg Ser	ggc Gly	atc Ile	cag Gln	aaa Lys 235	gtg Val	gtg Val	aaa Lys	gag Glu	cta Leu 240	ttt Phe	cat His	777
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aca Thr	gat Asp 260	ggg Gly	cag Gln	aaa Lys	ttc Phe	aga Arg 265	gac Asp	ccc Pro	ctg Leu	gag Glu	tat Tyr 270	aga Arg	cat His	gtc Val	atc Ile	873
cct Pro 275	gaa Glu	gca Ala	gag Glu	aaa Lys	gct Ala 280	ggg Gly	atc Ile	att Ile	cgc Arg	tat Tyr 285	gct Ala	ata Ile	ggg Gly	gtg Val	gga Gly 290	921
gat Asp	gcc Ala	ttc Phe	cgg Arg	gaa Glu 295	ccc Pro	act Thr	gcc Ala	cta Leu	cag Gln 300	gag Glu	ctg Leu	aac Asn	acc Thr	att Ile 305	ggc Gly	969
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gac Asp	gct Ala	tac Tyr 405	ctg Leu	ggt Gly	tac Tyr	tcc Ser	acc Thr 410	gca Ala	ctg Leu	gcc Ala	ttt Phe	tgg Trp 415	aag Lys	ggg Gly	gtc Val	1305
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Pro Gly Val Arg Ser Arg Trp His Cys Gly Thr Thr Leu His Gly Glu	
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Gln Gly His Pro Trp Gly Arg Phe Gly Ala Leu Thr Val Leu Gly	
515 520 525 530	
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Asp Val Asn Gly Asp Ser Leu Ala Asp Val Ala Ile Gly Ala Pro Gly	
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Glu Glu Glu Asn Arg Gly Ala Val Tyr Ile Phe His Gly Ala Ser Arg	
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Gln Asp Ile Ala Pro Ser Pro Ser Gln Arg Val Thr Gly Ser Gln Leu	
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Phe Leu Arg Leu Gln Tyr Phe Gly Gln Ser Leu Ser Gly Gly Gln Asp	
580 585 590	
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Leu Thr Gln Asp Gly Leu Val Asp Leu Ala Val Gly Ala Gln Gly His	
595 600 605 610	
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Val Leu Leu Leu Arg Ser Leu Pro Leu Leu Lys Val Gly Ile Ser Ile	
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Arg Phe Ala Pro Ser Glu Val Ala Lys Thr Val Tyr Gln Cys Trp Gly	
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Arg Thr Pro Thr Val Leu Glu Ala Gly Glu Ala Thr Val Cys Leu Thr	
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agg tat gat ctg gcg ttg gat ccg ggc cgt ctg att tct cgt gcc att	2121
Arg Tyr Asp Leu Ala Leu Asp Pro Gly Arg Leu Ile Ser Arg Ala Ile	
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Phe Asp Glu Thr Lys Asn Cys Thr Leu Thr Arg Arg Lys Thr Leu Gly	
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ctt ggt gat cac tgc gaa aca atg aag ctg ctt ttg cca gac tgt gtg	2217
Leu Gly Asp His Cys Glu Thr Met Lys Leu Leu Leu Pro Asp Cys Val	
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gag gat gca gtg acc cct atc atc ctg cgc ctt aac tta tcc ctg gca	2265
Glu Asp Ala Val Thr Pro Ile Ile Leu Arg Leu Asn Leu Ser Leu Ala	
725 730 735	
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Gly Asp Ser Ala Pro Ser Arg Asn Leu Arg Pro Val Leu Ala Val Gly	
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tca caa gac cat gta aca gct tct ttc ccg ttt gag aag aac tgt gag	2361
Ser Gln Asp His Val Thr Ala Ser Phe Pro Phe Glu Lys Asn Cys Glu	
755 760 765 770	
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Gly Asn Leu Gly Val Ser Phe Asn Phe Ser Gly Leu Gln Val Leu Glu	
775 780 785	
gta gga agc tcc cca gag ctg act gtg aca gta aca gtt tgg aat gag	2457
Val Gly Ser Ser Pro Glu Leu Thr Val Thr Val Thr Val Trp Asn Glu	
790 795 800	
ggt gag gac agc tat gga acc tta atc aag ttc tac tac cca gca gag	2505
Gly Glu Asp Ser Tyr Gly Thr Leu Ile Lys Phe Tyr Tyr Pro Ala Glu	
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cta tct tac cga cgg gtg aca aga gcc cag caa cct cat ccg tac cca	2553
Leu Ser Tyr Arg Arg Val Thr Arg Ala Gln Gln Pro His Pro Tyr Pro	
820 825 830	
cta cgc ctg gca tgt gag gct gag ccc acg ggc cag gag agc ctg agg	2601
Leu Arg Leu Ala Cys Glu Ala Glu Pro Thr Gly Gln Glu Ser Leu Arg	
835 840 845 850	
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Ser Ser Ser Cys Ser Ile Asn His Pro Ile Phe Arg Glu Gly Ala Lys	
855 860 865	
gcc acc ttc atg atc aca ttt gat gtc tcc tac aag gcc ttc ctg gga	2697
Ala Thr Phe Met Ile Thr Phe Asp Val Ser Tyr Lys Ala Phe Leu Gly	
870 875 880	
gac agg ttg ctt ctg agg gcc agc gca agc agt gag aat aat aag cct	2745
Asp Arg Leu Leu Leu Arg Ala Ser Ala Ser Ser Glu Asn Asn Lys Pro	
885 890 895	
gaa acc agc aag act gcc ttc cag ctg gag ctt ccg gtg aag tac acg	2793
Glu Thr Ser Lys Thr Ala Phe Gln Leu Glu Leu Pro Val Lys Tyr Thr	
900 905 910	
gtc tat acc gtg atc agt agg cag gaa gat tct acc aag cat ttc aac	2841
Val Tyr Thr Val Ile Ser Arg Gln Glu Asp Ser Thr Lys His Phe Asn	
915 920 925 930	
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<211> 1155

<212> PRT

<213> Mus musculus

<400> 46

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Asp	Ala	Ala	Ser	Phe	Gly	Gln	Thr	Val	Val	Gln	Phe	Gly	Gly	Ser	Arg
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Leu	Val	Val	Gly	Ala	Pro	Leu	Glu	Ala	Val	Ala	Val	Asn	Gln	Thr	Gly
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Leu	His	Ile	Pro	Leu	Glu	Ala	Val	Asn	Met	Ser	Leu	Gly	Leu	Ser	Leu
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Val	Ala	Asp	Thr	Asn	Asn	Ser	Gln	Leu	Leu	Ala	Cys	Gly	Pro	Thr	Ala
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Leu	Gly	Ser	Ser	Leu	Gln	Phe	Ile	Gln	Ala	Ile	Pro	Ala	Thr	Met	Pro
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Glu	Cys	Pro	Gly	Gln	Glu	Met	Asp	Ile	Ala	Phe	Leu	Ile	Asp	Gly	Ser
145					150					155					160
Gly	Ser	Ile	Asp	Gln	Ser	Asp	Phe	Thr	Gln	Met	Lys	Asp	Phe	Val	Lys
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Ala	Leu	Met	Gly	Gln	Leu	Ala	Ser	Thr	Ser	Thr	Ser	Phe	Ser	Leu	Met
			180					185					190		
Gln	Tyr	Ser	Asn	Ile	Leu	Lys	Thr	His	Phe	Thr	Phe	Thr	Glu	Phe	Lys
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Ser	Ser	Leu	Ser	Pro	Gln	Ser	Leu	Val	Asp	Ala	Ile	Val	Gln	Leu	Gln
	210					215					220				
Gly	Leu	Thr	Tyr	Thr	Ala	Ser	Gly	Ile	Gln	Lys	Val	Val	Lys	Glu	Leu
225					230					235					240
Phe	His	Ser	Lys	Asn	Gly	Ala	Arg	Lys	Ser	Ala	Lys	Lys	Ile	Leu	Ile
				245					250					255	
Val	Ile	Thr	Asp	Gly	Gln	Lys	Phe	Arg	Asp	Pro	Leu	Glu	Tyr	Arg	His
			260					265					270		
Val	Ile	Pro	Glu	Ala	Glu	Lys	Ala	Gly	Ile	Ile	Arg	Tyr	Ala	Ile	Gly
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Val	Gly	Asp	Ala	Phe	Arg	Glu	Pro	Thr	Ala	Leu	Gln	Glu	Leu	Asn	Thr
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Ile	Gly	Ser	Ala	Pro	Ser	Gln	Asp	His	Val	Phe	Lys	Val	Gly	Asn	Phe
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Val	Ala	Leu	Arg	Ser	Ile	Gln	Arg	Gln	Ile	Gln	Glu	Lys	Ile	Phe	Ala
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Ser	Gln	Glu	Gly	Phe	Ser	Ser	Ala	Leu	Ser	Met	Asp	Gly	Pro	Val	Leu
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Gly	Ala	Val	Gly	Gly	Phe	Ser	Trp	Ser	Gly	Gly	Ala	Phe	Leu	Tyr	Pro
	370					375					380				
Ser	Asn	Met	Arg	Ser	Thr	Phe	Ile	Asn	Met	Ser	Gln	Glu	Asn	Glu	Asp
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Met	Arg	Asp	Ala	Tyr	Leu	Gly	Tyr	Ser	Thr	Ala	Leu	Ala	Phe	Trp	Lys
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Gly	Val	His	Ser	Leu	Ile	Leu	Gly	Ala	Pro	Arg	His	Gln	His	Thr	Gly
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Lys	Val	Val	Ile	Phe	Thr	Gln	Glu	Ser	Arg	His	Trp	Arg	Pro	Lys	Ser
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Ser	Val	Asp	Met	Asp	Arg	Asp	Gly	Ser	Thr	Asp	Leu	Val	Leu	Ile	Gly
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Val	Pro	His	Tyr	Tyr	Glu	His	Thr	Arg	Gly	Gly	Gln	Val	Ser	Val	Cys
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Pro	Met	Pro	Gly	Val	Arg	Ser	Arg	Trp	His	Cys	Gly	Thr	Thr	Leu	His
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Gly	Glu	Gln	Gly	His	Pro	Trp	Gly	Arg	Phe	Gly	Ala	Ala	Leu	Thr	Val
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Leu	Gly	Asp	Val	Asn	Gly	Asp	Ser	Leu	Ala	Asp	Val	Ala	Ile	Gly	Ala
	530					535					540				
Pro	Gly	Glu	Glu	Glu	Asn	Arg	Gly	Ala	Val	Tyr	Ile	Phe	His	Gly	Ala
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Ser	Arg	Gln	Asp	Ile	Ala	Pro	Ser	Pro	Ser	Gln	Arg	Val	Thr	Gly	Ser
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Gln	Leu	Phe	Leu	Arg	Leu	Gln	Tyr	Phe	Gly	Gln	Ser	Leu	Ser	Gly	Gly
			580					585					590		
Gln	Asp	Leu	Thr	Gln	Asp	Gly	Leu	Val	Asp	Leu	Ala	Val	Gly	Ala	Gln
	595						600					605			
Gly	His	Val	Leu	Leu	Leu	Arg	Ser	Leu	Pro	Leu	Leu	Lys	Val	Gly	Ile
	610					615					620				

Ser 625	Ile	Arg	Phe	Ala	Pro 630	Ser	Glu	Val	Ala	Lys 635	Thr	Val	Tyr	Gln	Cys 640
Trp	Gly	Arg	Thr	Pro 645	Thr	Val	Leu	Glu	Ala 650	Gly	Glu	Ala	Thr	Val 655	Cys
Leu	Thr	Val	Arg 660	Lys	Gly	Ser	Pro	Asp 665	Leu	Leu	Gly	Asp	Val 670	Gln	Ser
Ser	Val	Arg 675	Tyr	Asp	Leu	Ala	Leu 680	Asp	Pro	Gly	Arg	Leu 685	Ile	Ser	Arg
Ala	Ile 690	Phe	Asp	Glu	Thr	Lys 695	Asn	Cys	Thr	Leu	Thr 700	Arg	Arg	Lys	Thr
Leu 705	Gly	Leu	Gly	Asp	His 710	Cys	Glu	Thr	Met	Lys 715	Leu	Leu	Leu	Pro	Asp 720
Cys	Val	Glu	Asp 725	Ala	Val	Thr	Pro	Ile	Ile 730	Leu	Arg	Leu	Asn	Leu 735	Ser
Leu	Ala	Gly 740	Asp	Ser	Ala	Pro	Ser	Arg 745	Asn	Leu	Arg	Pro	Val 750	Leu	Ala
Val	Gly 755	Ser	Gln	Asp	His	Val	Thr 760	Ala	Ser	Phe	Pro	Phe 765	Glu	Lys	Asn
Cys 770	Glu	Gly	Asn	Leu	Gly	Val 775	Ser	Phe	Asn	Phe 780	Ser	Gly	Leu	Gln	Val
Leu 785	Glu	Val	Gly	Ser	Ser 790	Pro	Glu	Leu	Thr	Val 795	Thr	Val	Thr	Val	Trp 800
Asn	Glu	Gly	Glu 805	Asp	Ser	Tyr	Gly	Thr	Leu 810	Ile	Lys	Phe	Tyr	Tyr 815	Pro
Ala	Glu	Leu	Ser 820	Tyr	Arg	Arg	Val	Thr 825	Arg	Ala	Gln	Gln	Pro 830	His	Pro
Tyr	Pro 835	Leu	Arg	Leu	Ala	Cys	Glu 840	Ala	Glu	Pro	Thr	Gly 845	Gln	Glu	Ser
Leu 850	Arg	Ser	Ser	Ser	Cys	Ser 855	Ile	Asn	His	Pro	Ile 860	Phe	Arg	Glu	Gly
Ala 865	Lys	Ala	Thr	Phe	Met 870	Ile	Thr	Phe	Asp	Val 875	Ser	Tyr	Lys	Ala	Phe 880
Leu	Gly	Asp	Arg 885	Leu	Leu	Leu	Arg	Ala	Ser 890	Ala	Ser	Ser	Glu	Asn 895	Asn
Lys	Pro	Glu 900	Thr	Ser	Lys	Thr	Ala	Phe 905	Gln	Leu	Glu	Leu	Pro 910	Val	Lys
Tyr	Thr 915	Val	Tyr	Thr	Val	Ile	Ser 920	Arg	Gln	Glu	Asp	Ser 925	Thr	Lys	His
Phe	Asn 930	Phe	Ser	Ser	Ser	His 935	Gly	Glu	Arg	Gln	Lys 940	Glu	Ala	Glu	His

Arg Tyr Arg Val Asn Asn Leu Ser Pro Leu Thr Leu Ala Ile Ser Val
945 950 955 960

Asn Phe Trp Val Pro Ile Leu Leu Asn Gly Val Ala Val Trp Asp Val
965 970 975

Thr Leu Arg Ser Pro Ala Gln Gly Val Ser Cys Val Ser Gln Arg Glu
980 985 990

Pro Pro Gln His Ser Asp Leu Leu Thr Gln Ile Gln Gly Arg Ser Val
995 1000 1005

Leu Asp Cys Ala Ile Ala Asp Cys Leu His Leu Arg Cys Asp Ile Pro
1010 1015 1020

Ser Leu Gly Thr Leu Asp Glu Leu Asp Phe Ile Leu Lys Gly Asn Leu
1025 1030 1035 1040

Ser Phe Gly Trp Ile Ser Gln Thr Leu Gln Lys Lys Val Leu Leu Leu
1045 1050 1055

Ser Glu Ala Glu Ile Thr Phe Asn Thr Ser Val Tyr Ser Gln Leu Pro
1060 1065 1070

Gly Gln Glu Ala Phe Leu Arg Ala Gln Val Ser Thr Met Leu Glu Glu
1075 1080 1085

Tyr Val Val Tyr Glu Pro Val Phe Leu Met Val Phe Ser Ser Val Gly
1090 1095 1100

Gly Leu Leu Leu Leu Ala Leu Ile Thr Val Ala Leu Tyr Lys Leu Gly
1105 1110 1115 1120

Phe Phe Lys Arg Gln Tyr Lys Glu Met Leu Asp Leu Pro Ser Ala Asp
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Leu Thr Ser
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<212> DNA
<213> Artificial Sequence

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49

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tgt cat ggg tct aac ctg gat gtg gag aag ccc gtc gtg ttc aaa gag 96
Cys His Gly Ser Asn Leu Asp Val Glu Lys Pro Val Val Phe Lys Glu
20 25 30

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Asp	Ala	Ala	Ser	Phe	Gly	Gln	Thr	Val	Val	Gln	Phe	Gly	Gly	Ser	Arg	
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ctc	gtg	gtg	gga	gcc	cct	ctg	gag	gcg	gtg	gca	gtc	aac	caa	aca	gga	192
Leu	Val	Val	Gly	Ala	Pro	Leu	Glu	Ala	Val	Ala	Val	Asn	Gln	Thr	Gly	
	50					55					60					
cag	tcg	tct	gac	tgt	ccg	cct	gcc	act	ggc	gtg	tgc	cag	ccc	atc	tta	240
Gln	Ser	Ser	Asp	Cys	Pro	Pro	Ala	Thr	Gly	Val	Cys	Gln	Pro	Ile	Leu	
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ctg	cac	att	ccc	cta	gag	gca	gtg	aac	atg	tcc	ctg	ggc	ctg	tct	ctg	288
Leu	His	Ile	Pro	Leu	Glu	Ala	Val	Asn	Met	Ser	Leu	Gly	Leu	Ser	Leu	
				85					90					95		
gtg	gct	gac	acc	aat	aac	tcc	cag	ttg	ctg	gct	tgt	ggt	cca	act	gca	336
Val	Ala	Asp	Thr	Asn	Asn	Ser	Gln	Leu	Leu	Ala	Cys	Gly	Pro	Thr	Ala	
			100					105					110			
cag	aga	gct	tgt	gca	aag	aac	atg	tat	gca	aaa	ggt	tcc	tgc	ctc	ctt	384
Gln	Arg	Ala	Cys	Ala	Lys	Asn	Met	Tyr	Ala	Lys	Gly	Ser	Cys	Leu	Leu	
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Leu	Gly	Ser	Ser	Leu	Gln	Phe	Ile	Gln	Ala	Ile	Pro	Ala	Thr	Met	Pro	
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Glu	Cys	Pro	Gly	Gln	Glu	Met	Asp	Ile	Ala	Phe	Leu	Ile	Asp	Gly	Ser	
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Gly	Ser	Ile	Asp	Gln	Ser	Asp	Phe	Thr	Gln	Met	Lys	Asp	Phe	Val	Lys	
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caa	tac	tca	aac	atc	ctg	aag	act	cat	ttt	acc	ttc	acg	gaa	ttc	aag	624
Gln	Tyr	Ser	Asn	Ile	Leu	Lys	Thr	His	Phe	Thr	Phe	Thr	Glu	Phe	Lys	
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Ser	Ser	Leu	Ser	Pro	Gln	Ser	Leu	Val	Asp	Ala	Ile	Val	Gln	Leu	Gln	
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Gly	Leu	Thr	Tyr	Thr	Ala	Ser	Gly	Ile	Gln	Lys	Val	Val	Lys	Glu	Leu	
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ttt	cat	agc	aag	aat	ggg	gcc	cga	aaa	agt	gcc	aag	aag	ata	cta	att	768
Phe	His	Ser	Lys	Asn	Gly	Ala	Arg	Lys	Ser	Ala	Lys	Lys	Ile	Leu	Ile	
				245					250					255		
gtc	atc	aca	gat	ggg	cag	aaa	ttc	aga	gac	ccc	ctg	gag	tat	aga	cat	816
Val	Ile	Thr	Asp	Gly	Gln	Lys	Phe	Arg	Asp	Pro	Leu	Glu	Tyr	Arg	His	
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gtg Val	gga Gly 290	gat Asp	gcc Ala	ttc Phe	cgg Arg	gaa Glu 295	ccc Pro	act Thr	gcc Ala	cta Leu	cag Gln 300	gag Glu	ctg Leu	aac Asn	acc Thr	912
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att Ile	gaa Glu	gga Gly	acc Thr 340	gaa Glu	tca Ser	agg Arg	tca Ser	agt Ser 345	agt Ser	tcc Ser	ttt Phe	cag Gln	cac His 350	gag Glu	atg Met	1056
tca Ser	caa Gln	gaa Glu 355	ggg Gly	ttc Phe	agc Ser	tca Ser	gct Ala 360	ctc Leu	tca Ser	atg Met	gat Asp	gga Gly 365	cca Pro	gtt Val	ctg Leu	1104
ggg Gly 370	gct Ala	gtg Val	gga Gly	ggc Gly	ttc Phe	agc Ser 375	tgg Trp	tct Ser	gga Gly	ggg Gly	gcc Ala 380	ttc Phe	ttg Leu	tac Tyr	ccc Pro	1152
tca Ser 385	aat Asn	atg Met	aga Arg	tcc Ser	acc Thr 390	ttc Phe	atc Ile	aac Asn	atg Met	tct Ser 395	cag Gln	gag Glu	aac Asn	gag Glu	gat Asp 400	1200
atg Met	agg Arg	gac Asp	gct Ala	tac Tyr 405	ctg Leu	ggg Gly	tac Tyr	tcc Ser	acc Thr 410	gca Ala	ctg Leu	gcc Ala	ttt Phe	tgg Trp 415	aag Lys	1248
ggg Gly	gtc Val	cac His	agc Ser 420	ctg Leu	atc Ile	ctg Leu	ggg Gly	gcc Ala 425	cct Pro	cgc Arg	cac His	cag Gln	cac His 430	acg Thr	ggg Gly	1296
aag Lys	gtt Val	gtc Val 435	atc Ile	ttt Phe	acc Thr	cag Gln	gaa Glu 440	tcc Ser	agg Arg	cac His	tgg Trp	agg Arg 445	ccc Pro	aag Lys	tct Ser	1344
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tct Ser 465	gtg Val	gac Asp	atg Met	gat Asp	aga Arg 470	gat Asp	ggc Gly	agc Ser	act Thr	gac Asp 475	ctg Leu	gtc Val	ctg Leu	att Ile	gga Gly 480	1440
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Cys Lys Gln Glu Leu Leu Cys Glu Gly Asn Leu Gly Val Ser Phe Asn	
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Phe Ser Gly Leu Gln Val Leu Glu Val Gly Ser Ser Pro Glu Leu Thr	
785 790 795 800	
gtg aca gta aca gtt tgg aat gag ggt gag gac agc tat gga acc tta	2448
Val Thr Val Thr Val Trp Asn Glu Gly Glu Asp Ser Tyr Gly Thr Leu	
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gcc cag caa cct cat ccg tac cca cta cgc ctg gca tgt gag gct gag	2544
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ccc acg ggc cag gag agc ctg agg agc agc agc tgt agc atc aat cac	2592
Pro Thr Gly Gln Glu Ser Leu Arg Ser Ser Ser Cys Ser Ile Asn His	
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ccc atc ttc cga gaa ggt gcc aag gcc acc ttc atg atc aca ttt gat	2640
Pro Ile Phe Arg Glu Gly Ala Lys Ala Thr Phe Met Ile Thr Phe Asp	
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Ala Ser Ser Glu Asn Asn Lys Pro Glu Thr Ser Lys Thr Ala Phe Gln	
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ctg gag ctt ccg gtg aag tac acg gtc tat acc gtg atc agt agg cag	2784
Leu Glu Leu Pro Val Lys Tyr Thr Val Tyr Thr Val Ile Ser Arg Gln	
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Gln Lys Glu Ala Glu His Arg Tyr Arg Val Asn Asn Leu Ser Pro Leu	
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 Leu Arg Cys Asp Ile Pro Ser Leu Gly Thr Leu Asp Glu Leu Asp Phe
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 Ile Leu Lys Gly Asn Leu Ser Phe Gly Trp Ile Ser Gln Thr Leu Gln
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 Lys Lys Val Leu Leu Leu Ser Glu Ala Glu Ile Thr Phe Asn Thr Ser
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 Val Tyr Ser Gln Leu Pro Gly Gln Glu Ala Phe Leu Arg Ala Gln Val
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 Ser Thr Met Leu Glu Glu Tyr Val Val Tyr Glu Pro Val Phe Leu Met
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 Ala Leu Tyr Lys Leu Gly Phe Phe Lys Arg Gln Tyr Lys Glu Met Leu
 1125 1130 1135
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 cat gag act cct cca cat ctc acg tcc taggaatcta ctttcctgta 3503
 His Glu Thr Pro Pro His Leu Thr Ser
 1155 1160
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Asp	Ala	Ala 35	Ser	Phe	Gly	Gln	Thr 40	Val	Val	Gln	Phe	Gly 45	Gly	Ser	Arg
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Gln 65	Ser	Ser	Asp	Cys	Pro 70	Pro	Ala	Thr	Gly	Val 75	Cys	Gln	Pro	Ile	Leu 80
Leu	His	Ile	Pro	Leu 85	Glu	Ala	Val	Asn	Met 90	Ser	Leu	Gly	Leu	Ser 95	Leu
Val	Ala	Asp	Thr 100	Asn	Asn	Ser	Gln	Leu 105	Leu	Ala	Cys	Gly	Pro 110	Thr	Ala
Gln	Arg	Ala 115	Cys	Ala	Lys	Asn	Met 120	Tyr	Ala	Lys	Gly	Ser 125	Cys	Leu	Leu
Leu	Gly 130	Ser	Ser	Leu	Gln	Phe 135	Ile	Gln	Ala	Ile	Pro 140	Ala	Thr	Met	Pro
Glu 145	Cys	Pro	Gly	Gln	Glu 150	Met	Asp	Ile	Ala	Phe 155	Leu	Ile	Asp	Gly	Ser 160
Gly	Ser	Ile	Asp	Gln 165	Ser	Asp	Phe	Thr	Gln 170	Met	Lys	Asp	Phe	Val 175	Lys
Ala	Leu	Met	Gly 180	Gln	Leu	Ala	Ser	Thr 185	Ser	Thr	Ser	Phe	Ser 190	Leu	Met
Gln	Tyr	Ser 195	Asn	Ile	Leu	Lys	Thr 200	His	Phe	Thr	Phe	Thr 205	Glu	Phe	Lys
Ser	Ser 210	Leu	Ser	Pro	Gln	Ser 215	Leu	Val	Asp	Ala	Ile 220	Val	Gln	Leu	Gln
Gly 225	Leu	Thr	Tyr	Thr 230	Ala	Ser	Gly	Ile	Gln	Lys 235	Val	Val	Lys	Glu	Leu 240
Phe	His	Ser	Lys	Asn 245	Gly	Ala	Arg	Lys	Ser 250	Ala	Lys	Lys	Ile	Leu 255	Ile
Val	Ile	Thr	Asp 260	Gly	Gln	Lys	Phe	Arg 265	Asp	Pro	Leu	Glu	Tyr 270	Arg	His
Val	Ile	Pro 275	Glu	Ala	Glu	Lys	Ala 280	Gly	Ile	Ile	Arg	Tyr 285	Ala	Ile	Gly
Val	Gly 290	Asp	Ala	Phe	Arg	Glu 295	Pro	Thr	Ala	Leu	Gln 300	Glu	Leu	Asn	Thr
Ile 305	Gly	Ser	Ala	Pro	Ser	Gln 310	Asp	His	Val	Phe 315	Lys	Val	Gly	Asn	Phe 320
Val	Ala	Leu	Arg	Ser 325	Ile	Gln	Arg	Gln	Ile 330	Gln	Glu	Lys	Ile	Phe 335	Ala

Ile Glu Gly Thr Glu Ser Arg Ser Ser Ser Ser Phe Gln His Glu Met
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Ser Gln Glu Gly Phe Ser Ser Ala Leu Ser Met Asp Gly Pro Val Leu
355 360 365

Gly Ala Val Gly Gly Phe Ser Trp Ser Gly Gly Ala Phe Leu Tyr Pro
370 375 380

Ser Asn Met Arg Ser Thr Phe Ile Asn Met Ser Gln Glu Asn Glu Asp
385 390 395 400

Met Arg Asp Ala Tyr Leu Gly Tyr Ser Thr Ala Leu Ala Phe Trp Lys
405 410 415

Gly Val His Ser Leu Ile Leu Gly Ala Pro Arg His Gln His Thr Gly
420 425 430

Lys Val Val Ile Phe Thr Gln Glu Ser Arg His Trp Arg Pro Lys Ser
435 440 445

Glu Val Arg Gly Thr Gln Ile Gly Ser Tyr Phe Gly Ala Ser Leu Cys
450 455 460

Ser Val Asp Met Asp Arg Asp Gly Ser Thr Asp Leu Val Leu Ile Gly
465 470 475 480

Val Pro His Tyr Tyr Glu His Thr Arg Gly Gly Gln Val Ser Val Cys
485 490 495

Pro Met Pro Gly Val Arg Ser Arg Trp His Cys Gly Thr Thr Leu His
500 505 510

Gly Glu Gln Gly His Pro Trp Gly Arg Phe Gly Ala Ala Leu Thr Val
515 520 525

Leu Gly Asp Val Asn Gly Asp Ser Leu Ala Asp Val Ala Ile Gly Ala
530 535 540

Pro Gly Glu Glu Glu Asn Arg Gly Ala Val Tyr Ile Phe His Gly Ala
545 550 555 560

Ser Arg Gln Asp Ile Ala Pro Ser Pro Ser Gln Arg Val Thr Gly Ser
565 570 575

Gln Leu Phe Leu Arg Leu Gln Tyr Phe Gly Gln Ser Leu Ser Gly Gly
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Gln Asp Leu Thr Gln Asp Gly Leu Val Asp Leu Ala Val Gly Ala Gln
595 600 605

Gly His Val Leu Leu Leu Arg Ser Leu Pro Leu Leu Lys Val Gly Ile
610 615 620

Ser Ile Arg Phe Ala Pro Ser Glu Val Ala Lys Thr Val Tyr Gln Cys
625 630 635 640

Trp Gly Arg Thr Pro Thr Val Leu Glu Ala Gly Glu Ala Thr Val Cys
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Leu Thr Val Arg Lys Gly Ser Pro Asp Leu Leu Gly Asp Val Gln Ser
660 665 670

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Ser Val Arg Tyr Asp Leu Ala Leu Asp Pro Gly Arg Leu Ile Ser Arg
675 680 685

Ala Ile Phe Asp Glu Thr Lys Asn Cys Thr Leu Thr Arg Arg Lys Thr
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Leu Gly Leu Gly Asp His Cys Glu Thr Met Lys Leu Leu Leu Pro Asp
705 710 715 720

Cys Val Glu Asp Ala Val Thr Pro Ile Ile Leu Arg Leu Asn Leu Ser
725 730 735

Leu Ala Gly Asp Ser Ala Pro Ser Arg Asn Leu Arg Pro Val Leu Ala
740 745 750

Val Gly Ser Gln Asp His Val Thr Ala Ser Phe Pro Phe Glu Lys Asn
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Cys Lys Gln Glu Leu Leu Cys Glu Gly Asn Leu Gly Val Ser Phe Asn
770 775 780

Phe Ser Gly Leu Gln Val Leu Glu Val Gly Ser Ser Pro Glu Leu Thr
785 790 795 800

Val Thr Val Thr Val Trp Asn Glu Gly Glu Asp Ser Tyr Gly Thr Leu
805 810 815

Ile Lys Phe Tyr Tyr Pro Ala Glu Leu Ser Tyr Arg Arg Val Thr Arg
820 825 830

Ala Gln Gln Pro His Pro Tyr Pro Leu Arg Leu Ala Cys Glu Ala Glu
835 840 845

Pro Thr Gly Gln Glu Ser Leu Arg Ser Ser Ser Cys Ser Ile Asn His
850 855 860

Pro Ile Phe Arg Glu Gly Ala Lys Ala Thr Phe Met Ile Thr Phe Asp
865 870 875 880

Val Ser Tyr Lys Ala Phe Leu Gly Asp Arg Leu Leu Leu Arg Ala Ser
885 890 895

Ala Ser Ser Glu Asn Asn Lys Pro Glu Thr Ser Lys Thr Ala Phe Gln
900 905 910

Leu Glu Leu Pro Val Lys Tyr Thr Val Tyr Thr Val Ile Ser Arg Gln
915 920 925

Glu Asp Ser Thr Lys His Phe Asn Phe Ser Ser Ser His Gly Glu Arg
930 935 940

Gln Lys Glu Ala Glu His Arg Tyr Arg Val Asn Asn Leu Ser Pro Leu
945 950 955 960

Thr Leu Ala Ile Ser Val Asn Phe Trp Val Pro Ile Leu Leu Asn Gly
965 970 975

Val Ala Val Trp Asp Val Thr Leu Arg Ser Pro Ala Gln Gly Val Ser
980 985 990

Cys Val Ser Gln Arg Glu Pro Pro Gln His Ser Asp Leu Leu Thr Gln
995 1000 1005

09551943 062604

Ile Gln Gly Arg Ser Val Leu Asp Cys Ala Ile Ala Asp Cys Leu His
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Leu Arg Cys Asp Ile Pro Ser Leu Gly Thr Leu Asp Glu Leu Asp Phe
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Ile Leu Lys Gly Asn Leu Ser Phe Gly Trp Ile Ser Gln Thr Leu Gln
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Val Tyr Ser Gln Leu Pro Gly Gln Glu Ala Phe Leu Arg Ala Gln Val
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Ser Thr Met Leu Glu Glu Tyr Val Val Tyr Glu Pro Val Phe Leu Met
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Ala Leu Tyr Lys Leu Gly Phe Phe Lys Arg Gln Tyr Lys Glu Met Leu
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His Glu Thr Pro Pro His Leu Thr Ser
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<212> DNA

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<223> Description of Artificial Sequence: primer

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Val Ile Leu Leu Cys Gly Trp Val Leu Ala Ser Cys His Gly Ser Asn
10 15 20

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cct Pro 55	ctg Leu	gag Glu	gcg Ala	gtg Val	gca Ala	gtc Val 60	aac Asn	caa Gln	aca Thr	gga Gly 65	cgg Arg	ttg Leu	tat Tyr	gac Asp	tgt Cys	246
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cag Gln 135	ttc Phe	atc Ile	cag Gln	gca Ala	gtc Val	cct Pro 140	gcc Ala	tcc Ser	atg Met	cca Pro	gag Glu 145	tgt Cys	cca Pro	aga Arg	caa Gln	486
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ctg Leu	aag Lys 200	acc Thr	cat His	ttt Phe	acc Thr	ttc Phe	act Thr 205	gaa Glu	ttc Phe	aag Lys	aac Asn	atc Ile 210	ctg Leu	gac Asp	cct Pro	678
cag Gln 215	agc Ser	ctg Leu	gtg Val	gat Asp	ccc Pro	att Ile 220	gtc Val	cag Gln	ctg Leu	caa Gln	ggc Gly 225	ctg Leu	acc Thr	tac Tyr	aca Thr	726
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Pro Trp Gly Arg Phe Gly Val Ala Leu Thr Val Leu Gly Asp Val Asn	
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Gly Asp Asn Leu Ala Asp Val Ala Ile Gly Ala Pro Gly Glu Glu Glu	
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Ser Arg Gly Ala Val Tyr Ile Phe His Gly Ala Ser Arg Leu Glu Ile	
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Met Pro Ser Pro Ser Gln Arg Val Thr Gly Ser Gln Leu Ser Leu Arg	
570 575 580	
ctg cag tat ttt ggg cag tca ttg agt ggg ggt cag gac ctt aca cag	1830
Leu Gln Tyr Phe Gly Gln Ser Leu Ser Gly Gly Gln Asp Leu Thr Gln	
585 590 595	
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Asp Gly Leu Val Asp Leu Ala Val Gly Ala Gln Gly His Val Leu Leu	
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Leu Arg Ser Leu Pro Leu Leu Lys Val Glu Leu Ser Ile Arg Phe Ala	
615 620 625	
ccc atg gag gtg gca aag gct gtg tac cag tgc tgg gaa agg act ccc	1974
Pro Met Glu Val Ala Lys Ala Val Tyr Gln Cys Trp Glu Arg Thr Pro	
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Thr Val Leu Glu Ala Gly Glu Ala Thr Val Cys Leu Thr Val His Lys	
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Gly Ser Pro Asp Leu Leu Gly Asn Val Gln Gly Ser Val Arg Tyr Asp	
665 670 675	
ctg gcg tta gat ccg ggc cgc ctg att tct cgt gcc att ttt gat gag	2118
Leu Ala Leu Asp Pro Gly Arg Leu Ile Ser Arg Ala Ile Phe Asp Glu	
680 685 690	
act aag aac tgc act ttg acg gga agg aag act ctg ggg ctt ggt gat	2166
Thr Lys Asn Cys Thr Leu Thr Gly Arg Lys Thr Leu Gly Leu Gly Asp	
695 700 705	
cac tgc gaa aca gtg aag ctg ctt ttg ccg gac tgt gtg gaa gat gca	2214
His Cys Glu Thr Val Lys Leu Leu Leu Pro Asp Cys Val Glu Asp Ala	
710 715 720 725	
gtg agc cct atc atc ctg cgc ctc aac ttt tcc ctg gtg aga gac tct	2262
Val Ser Pro Ile Ile Leu Arg Leu Asn Phe Ser Leu Val Arg Asp Ser	
730 735 740	

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gct Ala	tca Ser	ccc Pro	agg Arg 745	aac Asn	ctg Leu	cat His	cct Pro	gtg Val 750	ctg Leu	gct Ala	gtg Val	ggc Gly	tca Ser 755	caa Gln	gac Asp	2310
cac His	ata Ile	act Thr 760	gct Ala	tct Ser	ctg Leu	ccg Pro	ttt Phe 765	gag Glu	aag Lys	aac Asn	tgt Cys	aag Lys 770	caa Gln	gaa Glu	ctc Leu	2358
ctg Leu	tgt Cys 775	gag Glu	ggg Gly	gac Asp	ctg Leu	ggc Gly 780	atc Ile	agc Ser	ttt Phe	aac Asn	ttc Phe 785	tca Ser	ggc Gly	ctg Leu	cag Gln	2406
gtc Val 790	ttg Leu	gtg Val	gtg Val	gga Gly	ggc Gly 795	tcc Ser	cca Pro	gag Glu	ctc Leu	act Thr 800	gtg Val	aca Thr	gtc Val	act Thr	gtg Val 805	2454
tgg Trp	aat Asn	gag Glu	ggg Gly	gag Glu 810	gac Asp	agc Ser	tat Tyr	gga Gly	act Thr 815	tta Leu	gtc Val	aag Lys	ttc Phe	tac Tyr 820	tac Tyr	2502
cca Pro	gca Ala	ggg Gly	cta Leu 825	tct Ser	tac Tyr	cga Arg	cgg Arg	gta Val 830	aca Thr	ggg Gly	act Thr	cag Gln	caa Gln 835	cct Pro	cat His	2550
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ggg Gly 870	gca Ala	aag Lys	acc Thr	acc Thr	ttc Phe 875	atg Met	atc Ile	aca Thr	ttc Phe	gat Asp 880	gtc Val	tcc Ser	tac Tyr	aag Lys	gcc Ala 885	2694
ttc Phe	cta Leu	gga Gly	gac Asp	agg Arg 890	ttg Leu	ctt Leu	ctg Leu	agg Arg	gcc Ala 895	aaa Lys	gcc Ala	agc Ser	agt Ser	gag Glu 900	aat Asn	2742
aat Asn	aag Lys	cct Pro	gat Asp 905	acc Thr	aac Asn	aag Lys	act Thr	gcc Ala 910	ttc Phe	cag Gln	ctg Leu	gag Glu 915	ctc Leu	cca Pro	gtg Val	2790
aag Lys	tac Tyr 920	acc Thr	gtc Val	tat Tyr	acc Thr	ctg Leu	atc Ile 925	agt Ser	agg Arg	caa Gln	gaa Glu	gat Asp 930	tcc Ser	acc Thr	aac Asn	2838
cat His	gtc Val 935	aac Asn	ttt Phe	tca Ser	tct Ser	tcc Ser 940	cac His	ggg Gly	ggg Gly	aga Arg	agg Arg 945	caa Gln	gaa Glu	gcc Ala	gca Ala	2886
cat His 950	cgc Arg	tat Tyr	cgt Arg	gtg Val	aat Asn 955	aac Asn	ctg Leu	agt Ser	cca Pro	ctg Leu 960	aag Lys	ctg Leu	gcc Ala	gtc Val	aga Arg 965	2934
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Asp	Ala	Ala	Ser	Phe	Gly	Gln	Thr	Val	Val	Gln	Phe	Gly	Gly	Ser	Arg
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Leu	Val	Val	Gly	Ala	Pro	Leu	Glu	Ala	Val	Ala	Val	Asn	Gln	Thr	Gly
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Arg	Leu	Tyr	Asp	Cys	Ala	Pro	Ala	Thr	Gly	Met	Cys	Gln	Pro	Ile	Val
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Leu	Arg	Ser	Pro	Leu	Glu	Ala	Val	Asn	Met	Ser	Leu	Gly	Leu	Ser	Leu
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Val	Thr	Ala	Thr	Asn	Asn	Ala	Gln	Leu	Leu	Ala	Cys	Gly	Pro	Thr	Ala
			100					105					110		
Gln	Arg	Ala	Cys	Val	Lys	Asn	Met	Tyr	Ala	Lys	Gly	Ser	Cys	Leu	Leu
		115					120					125			
Leu	Gly	Ser	Ser	Leu	Gln	Phe	Ile	Gln	Ala	Val	Pro	Ala	Ser	Met	Pro
	130					135					140				
Glu	Cys	Pro	Arg	Gln	Glu	Met	Asp	Ile	Ala	Phe	Leu	Ile	Asp	Gly	Ser
	145				150					155					160
Gly	Ser	Ile	Asn	Gln	Arg	Asp	Phe	Ala	Gln	Met	Lys	Asp	Phe	Val	Lys
				165					170					175	
Ala	Leu	Met	Gly	Glu	Phe	Ala	Ser	Thr	Ser	Thr	Leu	Phe	Ser	Leu	Met
			180					185					190		
Gln	Tyr	Ser	Asn	Ile	Leu	Lys	Thr	His	Phe	Thr	Phe	Thr	Glu	Phe	Lys
		195					200					205			
Asn	Ile	Leu	Asp	Pro	Gln	Ser	Leu	Val	Asp	Pro	Ile	Val	Gln	Leu	Gln
	210					215					220				
Gly	Leu	Thr	Tyr	Thr	Ala	Thr	Gly	Ile	Arg	Thr	Val	Met	Glu	Glu	Leu
	225				230					235					240
Phe	His	Ser	Lys	Asn	Gly	Ser	Arg	Lys	Ser	Ala	Lys	Lys	Ile	Leu	Leu
				245					250					255	
Val	Ile	Thr	Asp	Gly	Gln	Lys	Tyr	Arg	Asp	Pro	Leu	Glu	Tyr	Ser	Asp
			260					265					270		
Val	Ile	Pro	Ala	Ala	Asp	Lys	Ala	Gly	Ile	Ile	Arg	Tyr	Ala	Ile	Gly
		275					280					285			
Val	Gly	Asp	Ala	Phe	Gln	Glu	Pro	Thr	Ala	Leu	Lys	Glu	Leu	Asn	Thr
	290					295					300				
Ile	Gly	Ser	Ala	Pro	Pro	Gln	Asp	His	Val	Phe	Lys	Val	Gly	Asn	Phe
	305				310					315					320
Ala	Ala	Leu	Arg	Ser	Ile	Gln	Arg	Gln	Leu	Gln	Glu	Lys	Ile	Phe	Ala
				325					330					335	

Ile Glu Gly Thr Gln Ser Arg Ser Ser Ser Ser Phe Gln His Glu Met
340 345 350

Ser Gln Glu Gly Phe Ser Ser Ala Leu Thr Ser Asp Gly Pro Val Leu
355 360 365

Gly Ala Val Gly Ser Phe Ser Trp Ser Gly Gly Ala Phe Leu Tyr Pro
370 375 380

Pro Asn Thr Arg Pro Thr Phe Ile Asn Met Ser Gln Glu Asn Val Asp
385 390 395 400

Met Arg Asp Ser Tyr Leu Gly Tyr Ser Thr Ala Val Ala Phe Trp Lys
405 410 415

Gly Val His Ser Leu Ile Leu Gly Ala Pro Arg His Gln His Thr Gly
420 425 430

Lys Val Val Ile Phe Thr Gln Glu Ala Arg His Trp Arg Pro Lys Ser
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Glu Val Arg Gly Thr Gln Ile Gly Ser Tyr Phe Gly Ala Ser Leu Cys
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Ser Val Asp Val Asp Arg Asp Gly Ser Xaa Asp Leu Val Leu Ile Gly
465 470 475 480

Ala Pro His Tyr Tyr Glu Gln Thr Arg Gly Gly Gln Val Ser Val Phe
485 490 495

Pro Val Pro Gly Val Arg Gly Arg Trp Gln Cys Glu Ala Thr Leu His
500 505 510

Gly Glu Gln Gly His Pro Trp Gly Arg Phe Gly Val Ala Leu Thr Val
515 520 525

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530 535 540

Pro Gly Glu Glu Glu Ser Arg Gly Ala Val Tyr Ile Phe His Gly Ala
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Ser Arg Leu Glu Ile Met Pro Ser Pro Ser Gln Arg Val Thr Gly Ser
565 570 575

Gln Leu Ser Leu Arg Leu Gln Tyr Phe Gly Gln Ser Leu Ser Gly Gly
580 585 590

Gln Asp Leu Thr Gln Asp Gly Leu Val Asp Leu Ala Val Gly Ala Gln
595 600 605

Gly His Val Leu Leu Leu Arg Ser Leu Pro Leu Leu Lys Val Glu Leu
610 615 620

Ser Ile Arg Phe Ala Pro Met Glu Val Ala Lys Ala Val Tyr Gln Cys
625 630 635 640

Trp Glu Arg Thr Pro Thr Val Leu Glu Ala Gly Glu Ala Thr Val Cys
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		675					680					685			
Ala	Ile	Phe	Asp	Glu	Thr	Lys	Asn	Cys	Thr	Leu	Thr	Gly	Arg	Lys	Thr
	690					695					700				
Leu	Gly	Leu	Gly	Asp	His	Cys	Glu	Thr	Val	Lys	Leu	Leu	Leu	Pro	Asp
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Cys	Val	Glu	Asp	Ala	Val	Ser	Pro	Ile	Ile	Leu	Arg	Leu	Asn	Phe	Ser
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Leu	Val	Arg	Asp	Ser	Ala	Ser	Pro	Arg	Asn	Leu	His	Pro	Val	Leu	Ala
			740					745					750		
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		755					760					765			
Cys	Lys	Gln	Glu	Leu	Leu	Cys	Glu	Gly	Asp	Leu	Gly	Ile	Ser	Phe	Asn
	770					775					780				
Phe	Ser	Gly	Leu	Gln	Val	Leu	Val	Val	Gly	Gly	Ser	Pro	Glu	Leu	Thr
785					790					795					800
Val	Thr	Val	Thr	Val	Trp	Asn	Glu	Gly	Glu	Asp	Ser	Tyr	Gly	Thr	Leu
				805					810					815	
Val	Lys	Phe	Tyr	Tyr	Pro	Ala	Gly	Leu	Ser	Tyr	Arg	Arg	Val	Thr	Gly
			820					825					830		
Thr	Gln	Gln	Pro	His	Gln	Tyr	Pro	Leu	Arg	Leu	Ala	Cys	Glu	Ala	Glu
		835					840					845			
Pro	Ala	Ala	Gln	Glu	Asp	Leu	Arg	Ser	Ser	Ser	Cys	Ser	Ile	Asn	His
	850					855					860				
Pro	Ile	Phe	Arg	Glu	Gly	Ala	Lys	Thr	Thr	Phe	Met	Ile	Thr	Phe	Asp
865					870					875					880
Val	Ser	Tyr	Lys	Ala	Phe	Leu	Gly	Asp	Arg	Leu	Leu	Leu	Arg	Ala	Lys
				885					890					895	
Ala	Ser	Ser	Glu	Asn	Asn	Lys	Pro	Asp	Thr	Asn	Lys	Thr	Ala	Phe	Gln
			900					905					910		
Leu	Glu	Leu	Pro	Val	Lys	Tyr	Thr	Val	Tyr	Thr	Leu	Ile	Ser	Arg	Gln
		915					920					925			
Glu	Asp	Ser	Thr	Asn	His	Val	Asn	Phe	Ser	Ser	Ser	His	Gly	Gly	Arg
	930					935					940				
Arg	Gln	Glu	Ala	Ala	His	Arg	Tyr	Arg	Val	Asn	Asn	Leu	Ser	Pro	Leu
945					950					955					960
Lys	Leu	Ala	Val	Arg	Val	Asn	Phe	Trp	Val	Pro	Val	Leu	Leu	Asn	Gly
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19

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32

<210> 90

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ggtgacacta tagaataggg c

21

<210> 91

<211> 18

<212> DNA

<213> Mus musculus

<400> 91

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<212> DNA

<213> rabbit

<220>

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Met Ala Leu Gly Ala Val Val Leu Leu Gly Val Leu Ala Ser Tyr His	
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gga ttc aac ttg gac gtg atg agc ggt gat ctt cca gga aga cgc agc	156
Gly Phe Asn Leu Asp Val Met Ser Gly Asp Leu Pro Gly Arg Arg Ser	
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Gly Leu Arg Ala Glu Arg Asp Ala Val Trp Gly Ser Arg Leu Val Val	
35 40 45	

gga gcc ccc ctg gcg gtg gtg tgc gcc aac cac aca gga cgg ctg tac	252
Gly Ala Pro Leu Ala Val Val Ser Ala Asn His Thr Gly Arg Leu Tyr	
50 55 60	

gag tgt gcg cct gcc tcc ggc acc tgc acg ccc att ttc cca ttc atg	300
Glu Cys Ala Pro Ala Ser Gly Thr Cys Thr Pro Ile Phe Pro Phe Met	
65 70 75 80	

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Gly Phe Asn Leu Asp Val Met Ser Gly Asp Leu Pro Gly Arg Arg Ser
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21

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<212> DNA

<213> Homo sapiens

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Gln	Asn	Leu	Val	Leu	Gly	Ala	Pro	Arg	Tyr	Gln	His	Thr	Gly	Lys	Ala	
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Val	Ile	Phe	Thr	Gln	Val	Ser	Arg	Gln	Trp	Arg	Lys	Lys	Ala	Glu	Val	
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Thr	Gly	Thr	Gln	Ile	Gly	Ser	Tyr	Phe	Gly	Ala	Ser	Leu	Cys	Ser	Val	
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His	Tyr	Tyr	Glu	Gln	Thr	Arg	Gly	Gly	Gln	Val	Ser	Val	Cys	Pro	Leu	
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Pro	Arg	Gly	Arg	Val	Gln	Trp	Gln	Cys	Asp	Ala	Val	Leu	Arg	Gly	Glu	
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Val	Leu	Leu	Leu	Arg	Ser	Leu	Pro	Val	Leu	Lys	Val	Gly	Val	Ala	Met
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Arg	Phe	Asp	Leu	Ala	Leu	Asp	Pro	Gly	Arg	Leu	Thr	Ser	Arg	Ala	Ile
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Phe	Asn	Glu	Thr	Lys	Asn	Pro	Thr	Leu	Thr	Arg	Arg	Lys	Thr	Leu	Gly
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Glu	Asp	Val	Val	Ser	Pro	Ile	Ile	Leu	His	Leu	Asn	Phe	Ser	Leu	Val
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Arg	Glu	Pro	Ile	Pro	Ser	Pro	Gln	Asn	Leu	Arg	Pro	Val	Leu	Ala	Val
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Gly	Ser	Gln	Asp	Leu	Phe	Thr	Ala	Ser	Leu	Pro	Phe	Glu	Lys	Asn	Cys
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Gly	Gln	Asp	Gly	Leu	Cys	Glu	Gly	Asp	Leu	Gly	Val	Thr	Leu	Ser	Phe
	770					775					780				
Ser	Gly	Leu	Gln	Thr	Leu	Thr	Val	Gly	Ser	Ser	Leu	Glu	Leu	Asn	Val
785					790				795						800
Ile	Val	Thr	Val	Trp	Asn	Ala	Gly	Glu	Asp	Ser	Tyr	Gly	Thr	Val	Val
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Ser	Leu	Tyr	Tyr	Pro	Ala	Gly	Leu	Ser	His	Arg	Arg	Val	Ser	Gly	Ala
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Pro	Thr	Glu	Asp	Glu	Gly	Leu	Arg	Ser	Ser	Arg	Cys	Ser	Val	Asn	His
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Val	Ser	Tyr	Lys	Ala	Thr	Leu	Gly	Asp	Arg	Met	Leu	Met	Arg	Ala	Ser
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Leu	Glu	Leu	Pro	Val	Lys	Tyr	Ala	Val	Tyr	Thr	Met	Ile	Ser	Arg	Gln
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Cys Val Ala Pro Asn Val Pro Leu Ser
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gca Ala	gcg Ala 30	ggc Gly	ttc Phe	ggg Gly	cag Gln	agc Ser 35	gtg Val	atg Met	cag Gln	ttt Phe	gga Gly 40	gga Gly	tct Ser	cga Arg	ctc Leu	148
gtg Val 45	gtg Val	gga Gly	gcc Ala	ccc Pro	ctg Leu 50	gcg Ala	gtg Val	gtg Val	tcg Ser	gcc Ala 55	aac Asn	cac His	aca Thr	gga Gly	cgg Arg 60	196
ctg Leu	tac Tyr	gag Glu	tgt Cys	gcg Ala 65	cct Pro	gcc Ala	tcc Ser	ggc Gly	acc Thr 70	tgc Cys	acg Thr	ccc Pro	att Ile	ttc Phe 75	cca Pro	244
ttc Phe	atg Met	ccc Pro	ccc Pro 80	gaa Glu	gcc Ala	gtg Val	aac Asn	atg Met 85	tcc Ser	ctg Leu	ggc Gly	ctg Leu	tcc Ser 90	ctg Leu	gca Ala	292
gcc Ala	tcc Ser	ccc Pro 95	aac Asn	cat His	tcc Ser	cag Gln	ctg Leu 100	ctg Leu	gct Ala	tgt Cys	ggc Gly	ccg Pro 105	acc Thr	gtg Val	cat His	340
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gat Asp 125	gcc Ala	cac His	gca Ala	cag Gln	ccc Pro 130	atc Ile	ggg Gly	act Thr	gtg Val	cca Pro 135	gct Ala	gcc Ala	ctg Leu	ccc Pro	gag Glu 140	436
tgc Cys	cca Pro	gat Asp	caa Gln	gag Glu 145	atg Met	gac Asp	att Ile	gtc Val	ttc Phe 150	ctg Leu	att Ile	gac Asp	ggc Gly	tct Ser 155	ggc Gly	484
agc Ser	att Ile	agc Ser	tca Ser 160	aat Asn	gac Asp	ttc Phe	cgc Arg	aag Lys 165	atg Met	aag Lys	gac Asp	ttt Phe 170	gtc Val	aga Arg	gct Ala	532
gtg Val	atg Met	gac Asp 175	cag Gln	ttc Phe	aag Lys	gac Asp	acc Thr 180	aac Asn	acc Thr	cag Gln	ttc Phe 185	tcg Ser 185	ctg Leu	atg Met	cag Gln	580
tac Tyr	tcc Ser 190	aat Asn	gtg Val	ctg Leu	gtg Val	aca Thr 195	cat His	ttc Phe	acc Thr	ttc Phe	agc Ser 200	agc Ser	ttc Phe	cgg Arg	aac Asn	628
agc Ser 205	tcc Ser	aat Asn	cct Pro	cag Gln	ggc Gly 210	cta Leu	gtg Val	gag Glu	ccc Pro	att Ile 215	gtg Val	cag Gln	ctg Leu	aca Thr	ggc Gly 220	676
ctc Leu	acg Thr	ttc Phe	acg Thr	gcc Ala 225	aca Thr	ggg Gly	atc Ile	ctg Leu	aaa Lys 230	gtg Val	gtg Val	aca Thr	gag Glu	ctg Leu	ttt Phe	724
caa Gln	acc Thr	aag Lys	aac Asn 240	ggg Gly	gcc Ala	cgc Arg	gaa Glu 245	agt Ser	gcc Ala	aag Lys	aag Lys	atc Ile 250	ctc Leu	atc Ile	gtc Val	772

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Gly Gln Ser Val Met Gln Phe Gly Gly Ser Arg Leu Val Val Gly Ala
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His	Ser	Gln	Leu	Leu	Ala	Cys	Gly	Pro	Thr	Val	His	Arg	Ala	Cys	Gly
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Asn	Asp	Phe	Arg	Lys	Met	Lys	Asp	Phe	Val	Arg	Ala	Val	Met	Asp	Gln
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Phe	Lys	Asp	Thr	Asn	Thr	Gln	Phe	Ser	Leu	Met	Gln	Tyr	Ser	Asn	Val
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Gln	Gly	Leu	Val	Glu	Pro	Ile	Val	Gln	Leu	Thr	Gly	Leu	Thr	Phe	Thr
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Ala	Thr	Gly	Ile	Leu	Lys	Val	Val	Thr	Glu	Leu	Phe	Gln	Thr	Lys	Asn
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Gly	Ala	Arg	Glu	Ser	Ala	Lys	Lys	Ile	Leu	Ile	Val	Ile	Thr	Asp	Gly
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Gln	Lys	Tyr	Lys	Asp	Pro	Leu	His	Tyr	Ser	Ala	Val	Ile	Pro	Gln	Ala
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Pro	Asp	Ala	His	Val	Phe	Gln	Val	Asp	Asn	Phe	Ser	Ala	Leu	Ser	Ser
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Ile	Gln	Lys	Gln	Leu	Tyr	Asp	Arg	Ile	Phe	Ala	Val	Glu	Gly	Thr	Leu
				325					330					335	
Ser	Ser	Ala	Ser	Thr	Ser	Phe	Gln	His	Glu	Met	Ser	Gln	Glu	Gly	Phe
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Thr Phe Ile Asn Met Ser Gln Gln Asn Val Asp Met Arg Asp Ser Tyr
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<220>
<221> CDS
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ctg gtc tct cgg gcc att ttt caa gag acc cag aac cag act tta act 96
Leu Val Ser Arg Ala Ile Phe Gln Glu Thr Gln Asn Gln Thr Leu Thr
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cga agg aag acc ctg ggg ctg ggg cgt cac tgt gaa acc atg agg cta 144
Arg Arg Lys Thr Leu Gly Leu Gly Arg His Cys Glu Thr Met Arg Leu
35 40 45

ctt ttg cca gac tgc gta gag gac gtg gtg aac ccc atc gtc ctg cac 192
Leu Leu Pro Asp Cys Val Glu Asp Val Val Asn Pro Ile Val Leu His
50 55 60

ctc aac ttc tcc ctg gag gga cag cca atc ctc tca tcc cag aat ctg 240
Leu Asn Phe Ser Leu Glu Gly Gln Pro Ile Leu Ser Ser Gln Asn Leu
65 70 75 80

cgc cct gtg ctg gcc acg ggc tcg cag gac cac ttc att gcc tcc ctc 288
Arg Pro Val Leu Ala Thr Gly Ser Gln Asp His Phe Ile Ala Ser Leu
85 90 95

ccc ttt gag aag aac tgc gga caa gat cgc ctg tgt gag ggg gac ctg 336
Pro Phe Glu Lys Asn Cys Gly Gln Asp Arg Leu Cys Glu Gly Asp Leu
100 105 110

agc atc agc ttc aac ttc tcg ggc ttg aat acc ctg ctg gtg ggg ctc 384
Ser Ile Ser Phe Asn Phe Ser Gly Leu Asn Thr Leu Leu Val Gly Leu
115 120 125

tcc ctg gag ctc aca gtg aca gtg acc gtg cgg aat gag ggc gag gac 432
Ser Leu Glu Leu Thr Val Thr Val Thr Val Arg Asn Glu Gly Glu Asp
130 135 140

tcc tat ggg acc gcc atc acc ctc tac tac cca gca ggg cta tcc tac 480
Ser Tyr Gly Thr Ala Ile Thr Leu Tyr Tyr Pro Ala Gly Leu Ser Tyr
145 150 155 160

agg cgg gtg tcg ggc cag aca caa ccc tgg cag cgc ccc ctg cac ctc 528
Arg Arg Val Ser Gly Gln Thr Gln Pro Trp Gln Arg Pro Leu His Leu
165 170 175

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Ala Cys Glu Ala Val Pro Thr Glu Ser Glu Gly Leu Arg Ser Thr Ser	
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Cys Ser Val Asn His Pro Ile Phe Gln Gly Gly Ala Gln Gly Thr Phe	
195 200 205	
gta gtc aag ttc gat gtc tcc tcc aag gcc agc ctg ggt gac agg ttg	672
Val Val Lys Phe Asp Val Ser Ser Lys Ala Ser Leu Gly Asp Arg Leu	
210 215 220	
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Leu Met Gly Ala Ser Ala Ser Ser Glu Asn Asn Lys Pro Ala Ser Asn	
225 230 235 240	
aag acc tcc ttt gag ctg gaa ctg cca gtg aaa tac gct gtc tac atg	768
Lys Thr Ser Phe Glu Leu Glu Leu Pro Val Lys Tyr Ala Val Tyr Met	
245 250 255	
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Met Ile Thr Arg His Glu Gly Ser Thr Arg Phe Phe Asn Phe Ser Thr	
260 265 270	
tcc gct gag aag agc agc aaa gag gcc gag cac cgc tat cgg gtg aac	864
Ser Ala Glu Lys Ser Ser Lys Glu Ala Glu His Arg Tyr Arg Val Asn	
275 280 285	
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Asn Leu Ser Leu Arg Asp Val Ala Val Ser Val Asp Phe Trp Ala Pro	
290 295 300	
gtg cag ctg aac gga gca gct gtg tgg gac gtg gcg gtg gag gcc cct	960
Val Gln Leu Asn Gly Ala Ala Val Trp Asp Val Ala Val Glu Ala Pro	
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Ala Gln Ser Leu Pro Cys Ala Arg Glu Arg Glu Pro Pro Arg Thr Ser	
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Asp Leu Ser Arg Val Pro Gly Ser Pro Val Leu Asp Cys Ser Val Ala	
340 345 350	
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His Cys Leu Arg Phe Arg Cys His Ile Pro Ser Phe Ser Ala Lys Glu	
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Glu Leu His Phe Thr Leu Lys Gly Asn Leu Ser Phe Ala Trp Val Ser	
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Gln Met Leu Gln Lys Lys Val Ser Val Val Ser Val Ala Glu Ile Thr	
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Phe Asn Arg Ala Val Tyr Ser Gln Val Pro Gly Glu Glu Pro Phe Met	
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Arg Arg Val Ser Gly Gln Thr Gln Pro Trp Gln Arg Pro Leu His Leu
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Cys	Ser	Val	Asn	His	Pro	Ile	Phe	Gln	Gly	Gly	Ala	Gln	Gly	Thr	Phe		
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Val	Val	Lys	Phe	Asp	Val	Ser	Ser	Lys	Ala	Ser	Leu	Gly	Asp	Arg	Leu		
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Lys	Thr	Ser	Phe	Glu	Leu	Glu	Leu	Pro	Val	Lys	Tyr	Ala	Val	Tyr	Met		
			245						250					255			
Met	Ile	Thr	Arg	His	Glu	Gly	Ser	Thr	Arg	Phe	Phe	Asn	Phe	Ser	Thr		
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Ser	Ala	Glu	Lys	Ser	Ser	Lys	Glu	Ala	Glu	His	Arg	Tyr	Arg	Val	Asn		
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Leu	Ile	Ser	Ala	Thr	Leu	Tyr	Lys	Leu	Gly	Phe	Phe	Lys	Arg	Arg	Tyr		
	450					455					460						
Lys	Glu	Met	Leu	Gly	Glu	Lys	Pro	Gly	Asp	Ala	Ala	Thr	Phe	Pro	Gly		
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24

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<220>
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<212> DNA
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<223> Description of Artificial Sequence: primer

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<212> DNA
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<223> Description of Artificial Sequence: primer

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<212> PRT
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<210> 110
<211> 14
<212> PRT
<213> monkey

<400> 110
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1 5 10

<210> 111
<211> 15
<212> PRT
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<400> 111
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Gly

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<212> PRT
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<211> 17
<212> PRT
<213> Homo sapiens

<400> 114
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Gly

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